

CR-ERNS Report -- Addendum to Form R

This Form serves as an addendum to EPCRA Section 313 Toxic Release Inventory (TRI) Form R. This along with EPCRA 313 Form R will provide EPA with the required information for reporting continuous releases.

Name of Facility: **Coffeen Power Station**

CR-ERNS #: 626033

Type of Report: Indicate below the type of report you are submitting.

☐

Initial
Written
Report

☐

First
Anniversary
Follow-up
Report

☐

Written Notification
of a Change to Initial
Written Report

☒

Written Notification
of a Change to
Follow-up Report

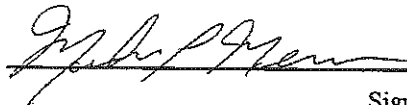
Signed Statement: I certify that the hazardous substances releases described herein are continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(a) or 355.4(a)(2)(iii) and that all submitted information is accurate and current to the best of my knowledge.

Michael L. Menne, VP Environmental Services

Name and Position

01/04/2010

Date



Signature

Population Density: Choose the range that describes the population density within a one-mile radius of your facility.

0 - 50 people

101 - 500 people

Over 1000 people

☒ _____

51-100 people

501-1000 people

Sensitive Populations and Ecosystems: Indicate all sensitive populations and ecosystems within a one-mile radius include the distance and direction from the facility.

Sensitive Population or Ecosystems	Distance and direction from facility
Potential Bald Eagle habitat	Within 1 mile surrounding facility
Potential Eastern Blue-Eyed Grass habitat	Within 1 mile surrounding facility

CR-ERNS Report -- Addendum to Form R**CR-ERNS #: 626033**

Source Information: For EACH source of a release from your facility, provide the following information on a SEPARATE sheet.

Name of Source: stack

Indicate whether the release from this source is either:
continuous without interruption _____ OR routine, anticipated, intermittent _____

Pattern of the Release: Identify below how you established the pattern of release and calculated release estimates.

☒ Past release data ☒ Knowledge of the facility's operations and release history ☒ Engineering Estimates
☐ AP-42 ☒ Best professional judgement ☐ Other (explain)

Environmental Medium affected by the release from this source:

☒ Air ☐ Surface Water ☐ Soil or Ground Water

Air

If release is to air, please indicate stack height OR surface area of the release.

500 ft Stack Height OR _____ Surface Area

Surface Water

If release is to Surface Water, please indicate name, type and specific information of the water body:

Name of water body _____

If stream: _____ Stream Order OR _____ Average flow rate (ft³/sec)

If lake: _____ Surface area (ac) AND _____ Average Depth (m)

Soil or Ground Water

Indicate distance of closest water well: _____

Hazardous Substance Information:

Name of Hazardous Substance:	CASRN#	Upper Bound (in lbs. or kg per day)	Lower Bound	Number of Days Release Occurs (per year)	Months of the Release
Hydrochloric Acid	7647-01-0	21,344	64	320	Jan. thru Dec.
Hydrofluoric Acid	7664-39-3	1,218	510	320	Jan. thru Dec.
Sulfuric Acid	7664-93-9	5,184	104	320	Jan. thru Dec.

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION I: GENERAL INFORMATION

CR-ERNS Number: 626,033

Date of Initial Release: Ongoing

Date of Initial Call to NRC: 10-14-2002

Type of Report: Select from the drop-down list, the type of report that you are submitting

Written Notification of a Change to Follow-up Report

Signed Statement: I certify that the hazardous substance releases described herein are continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(a) or 355.32 and that all submitted information is accurate and current to the best of my knowledge.

Date

1/12/10

Name and Position

Randy O'Keefe

Signature

Randy O'Keefe

Part A. Facility or Vessel Information

Name of Facility or Vessel

Coffeen Power Station

Person in Charge of Facility or Vessel

Name

Randy O'Keefe

Position

Managing Director

Phone Number

+1 (217) 534-7646

Alt Phone No.

+1 (618) 223-3371

Facility Address or Vessel Port of Registration

Street

134 CIPS Lane

County

Montgomery

City

Coffeen

State

IL

Zip Code

62017

Dun and Bradstreet Number for Facility

157,912,242

Facility/Vessel Location

Latitude

Deg

39

Min

3

Sec

31

Longitude

Deg

89

Min

24

Sec

11

Vessel LORAN Coordinates

NOTE: Latitude/Longitude information can be obtained at the following websites: <http://www.satsig.net/maps/lat-long-finder.htm>, <http://earth.google.com/>, and <http://www.census.gov/geo/landview/>. Do not use P.O. Box, Rural Route or Mailing Address. Use physical location only.

Part B. Population Information

Population Density

Select from the drop-down list, the range that describes the population density within a one-mile radius of your facility or vessel.

51 - 100 persons

Sensitive Populations and Ecosystems within One-Mile Radius

Sensitive Populations or Ecosystems (e.g., elementary schools, hospitals, retirement communities, or wetlands)

Estimated Distance and Direction from Facility, if Known

None

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION II: SOURCE INFORMATION

CR-ERNS Number: 626,033

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.

For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet.

Name of Source:

Coffeen Power Station - Unit 1 Stack

1. Indicate whether the release from this source is either:



Continuous without interruption

OR



routine, anticipated, intermittent & incidental to

Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.

2. Provide a brief statement describing the basis for stating that the release is continuous and stable in quantity and rate. If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate given the **note** above.

During the combustion process, the nitrogen that is present naturally in the coal, and the nitrogen and oxygen present in the combustion air combine to form NOx. Prior to being released to the atmosphere, the exhaust gas is passed through a large catalyst where the NOx reacts with the catalyst and anhydrous ammonia and is converted to nitrogen and water. Selective catalytic reduction removes between 80 and 90 percent of the NOx that is in the exhaust gas of a coal-fired power plant.

3. Identify below how you established the pattern or release and calculated release estimates.



Release data



Knowledge of Operating Procedures



Engineering estimate



Best Professional judgment

Other -

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION II: SOURCE INFORMATION

CR-ERNS Number: 626,033

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.

For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet.

Name of Source:

Coffeen Power Station - Unit 2 Stack

1. Indicate whether the release from this source is either:



Continuous without interruption

OR



routine, anticipated, intermittent & incidental to

Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.

2. Provide a brief statement describing the basis for stating that the release is continuous and stable in quantity and rate. If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate given the **note** above.

During the combustion process, the nitrogen that is present naturally in the coal, and the nitrogen and oxygen present in the combustion air combine to form NOx. Prior to being released to the atmosphere, the exhaust gas is passed through a large catalyst where the NOx reacts with the catalyst and anhydrous ammonia and is converted to nitrogen and water. Selective catalytic reduction removes between 80 and 90 percent of the NOx that is in the exhaust gas of a coal-fired power plant.

3. Identify below how you established the pattern or release and calculated release estimates.



Release data



Knowledge of Operating Procedures



Engineering estimate



Best Professional judgment

Other -

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION II: SOURCE INFORMATION (continued)

CR-ERNS Number: 626,033

Name of Source: Coffeen Power Station - Unit 1 Stack

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to EACH medium as a separate source and complete Section II, Parts A, B, and C, of this format for EACH medium affected.

☒ **AIR** If the medium affected is air, please also specify whether the source is a **stack** or a **ground-based area source**.

☒ **Stack** Indicate stack height in feet or meters 575 feet

☐ **SURFACE WATER**

If the release affects any **surface water body**, give the name of the water body.

☐ **Surface Water Body**

☐ **Stream** If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.

Stream Order OR Average Flow Rate (cubic feet/second)

☐ **Lake** Surface area of lake (in acres) Average depth of lake (in meters)

If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.

☐ **SOIL OR GROUND WATER**

If the release is on or under ground, the location of public water supply wells within two miles.

Optional Information

The following information is not required to comply with the regulation; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

For a stack release to air, provide the following information, if available:

Inside diameter (feet or meters) Gas Exit Velocity (ft or meters/sec) Gas Temp (degrees Fahrenheit, Kelvin, or Celsius)

For a release to surface water, provide the following information, if available:

Average velocity of surface water (feet/second)

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION II: SOURCE INFORMATION (continued)

CR-ERNS Number: 626,033

Name of Source: Coffeen Power Station - Unit 2 Stack

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to EACH medium as a separate source and complete Section II, Parts A, B, and C, of this format for EACH medium affected.

☒ **AIR** If the medium affected is air, please also specify whether the source is a **stack** or a ground-based **area source**.

☒ **Stack** Indicate stack height in feet or meters

575 feet

☐ **SURFACE WATER**

If the release affects any **surface water body**, give the name of the water body.

☐ **Surface Water Body**

☐ **Stream**

If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.

Stream Order

OR

Average Flow Rate (cubic feet/second)

☐ **Lake**

Surface area of lake (in acres)

Average depth of lake (in meters)

If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.

☐ **SOIL OR GROUND WATER**

If the release is on or under ground, the location of public water supply wells within two miles.

Optional Information

The following information is not required to comply with the regulation; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

For a stack release to air, provide the following information, if available:

Inside diameter (feet or meters)

Gas Exit Velocity (ft or meters/sec)

Gas Temp (degrees Fahrenheit, Kelvin, or Celsius)

For a release to surface water, provide the following information, if available:

Average velocity of surface water (feet/second)

Continuous Release Reporting Form

SECTION II: SOURCE INFORMATION (continued)

CR-ERNS Number: 626,033

Part C: Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source
Please provide a *SEPARATE* sheet for *EACH* source.

Name of Source:

Coffeen Power Station - Unit 1

List each hazardous substance released from the source identified above and provide the following information. Include units where appropriate. Radionuclides in curies (Ci).

Name of Hazardous Substance	CASRN #	Normal Range (in lbs., kg, or Ci per day)		Number of Days Release Occurs (per year)	Total Quantity Released in Previous Year (in lbs., kg, or Ci)	Period of the Release
Ammonia	7664-41-7	Upper Bound	Lower Bound	314	9,350 lbs.	Jan - Dec
Hydrochloric Acid	7647-01-0	8.9 lbs.	0	314	782 lbs.	Jan - Dec
Hydrogen Flouride	7661-39-3	13 lbs.	0	314	3,092 lbs.	Jan - Dec
Sulfuric Acid	7664-93-9	30 lbs.	0	314	7,087 lbs.	Jan - Dec

List each mixture released from the source identified above and provide the following information. Include units where appropriate. Radionuclides in curies (Ci).

Name of Mixture	Name of Hazardous Substance Components	CASRN #	Normal Range of Components (in lbs., kg, or Ci per day)		Normal Range of Mixture (in lbs., kg, or Ci per day)		Number of Days Release Occurs (per year)	Total Quantity of Mixture Released in Previous Year (in lbs., kg or Ci)	Period of the Release
			Upper Bound	Lower Bound	Upper Bound	Lower Bound			
None									

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION II: SOURCE INFORMATION (continued)

CR-ERNS Number: 626,033

Part C: Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source Please provide a SEPARATE sheet for EACH source.

Name of Source: Coffeen Power Station - Unit 2

List each hazardous substance released from the source identified above and provide the following information. Include units where appropriate. Radionuclides in curies (Ci).

Name of Hazardous Substance	CASRN #	Normal Range (in lbs., kg, or Ci per day)		Number of Days Release Occurs (per year)	Total Quantity Released in Previous Year (in lbs., kg, or Ci)	Period of the Release
Ammonia	7664-41-7	Upper Bound	Lower Bound	313	16,404 lbs.	Jan - Dec
Hydrochloric Acid	7647-01-0	5.6 lbs.	0	313	1,371 lbs.	Jan - Dec
Hydrogen Flouride	7661-39-3	22 lbs	0	313	5,423 lbs.	Jan - Dec
Sulfuric Acid	7664-93-9	51 lbs.	0	313	12,433 lbs.	Jan - Dec

List each mixture released from the source identified above and provide the following information. Include units where appropriate. Radionuclides in curies (Ci).

Name of Hazardous Substance Components	CASRN #	Weight Percentage	Normal Range of Components (in lbs., kg, or Ci per day)		Normal Range of Mixture (in lbs., kg, or Ci per day)		Number of Days Release Occurs (per year)	Total Quantity of Mixture Released in Previous Year (in lbs., kg or Ci)	Period of the Release
			Upper Bound	Lower Bound	Upper Bound	Lower Bound			
None									

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION III: SUBSTANCE INFORMATION

CR-ERNS Number: 626,033

Calculation of the SSI Trigger

For EACH hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance.

Name of Hazardous Substance: Ammonia, CASRN # 7664-41-7

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)	Upper Bound of the Normal Range of the Release (specify lbs., kg., or Ci)
Coffeen Power Station - Unit 1	39 lbs/day
Coffeen Power Station - Unit 2	68 lbs/day

TOTAL - SSI trigger for this hazardous substance release*: 107 lbs/day

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION III: SUBSTANCE INFORMATION

CR-ERNS Number: 626,033

Calculation of the SSI Trigger

For EACH hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance.

Name of Hazardous Substance: Sulfuric Acid, CASRN # 7664-93-9

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)	Upper Bound of the Normal Range of the Release (specify lbs., kg., or Ci)
Coffeen Power Station - Unit 1	30 lbs/day
Coffeen Power Station - Unit 2	51 lbs/day

TOTAL - SSI trigger for this hazardous substance release*: 81 lbs/day

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION III: SUBSTANCE INFORMATION

CR-ERNS Number: 626,033

Calculation of the SSI Trigger

For EACH hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance.

Name of Hazardous Substance:

Hydrochloric Acid, CASRN # 7647-01-0

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)	Upper Bound of the Normal Range of the Release (specify lbs., kg., or Ci)
Coffeen Power Station - Unit 1	3.3 lbs/day
Coffeen Power Station - Unit 2	5.6 lbs/day

TOTAL - SSI trigger for this hazardous substance release*: 8.9 lbs/day

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

Continuous Release Reporting Form

Form Approved OMB No. 2050-0086
Expiration Date: 11-30-2018

SECTION III: SUBSTANCE INFORMATION

CR-ERNS Number: 626,033

Calculation of the SSI Trigger

For EACH hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance.

Name of Hazardous Substance:

Hydrogen Fluoride, CASNR #7661-39-3

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)	Upper Bound of the Normal Range of the Release (specify lbs., kg., or Ci)
Coffeen Power Station - Unit 1	13 lbs/day
Coffeen Power Station - Unit 2	22 lbs/day

TOTAL - SSI trigger for this hazardous substance release*: 35 lbs/day

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

SECTION I: GENERAL INFORMATION

CR-ERNS Number: 626033

Date of Initial Release: 10/14/2002

Date of Initial Call to NRC: 10/14/2002

Type of Report: Indicate below the type of report you are submitting.☐ Initial Written Notification☒ First Anniversary
Follow-up Report☐ Written Notification
of a Change to
Initial Notification☐ Written Notification
of a Change to
Follow-up Report

Signed Statement: I certify that the hazardous substances releases described herein are continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(a) or 355.4(a)(2)(iii) and that all submitted information is accurate and current to the best of my knowledge.

Michael Menne, VP of ESH
Name and Position12-09-03
Date
Signature**Part A. Facility or Vessel Information**

Name of Facility or Vessel

Coffeen Power Station

Person
in Charge
of Facility
or Vessel

Name of Person in Charge Jim Williams

Position Plant Manager

Telephone No. (217) 534-7646

Alternate Telephone No. (217) 534-7600

Facility
Address or
Vessel
Port of
Registration

Street 134 CIPS Lane

County Montgomery

City Coffeen

State IL Zip Code 62017

Dun and Bradstreet Number for Facility

364138990

Facility/Vessel
LocationLatitude Deg 39 Min 03 Sec 31
Longitude Deg 089 Min 24 Sec 11

Vessel LORAN Coordinates

Part B. Population InformationPopulation
Density

Choose the range that describes the population density within a one-mile radius of your facility or vessel (Indicate by placing an "X" in the appropriate blank below).

___ 0 - 50 persons

___ 101 - 500 persons

___ more than 1000 persons

☒ 51 - 100 persons

___ 501 - 1000 persons

Sensitive
Populations
and
Ecosystems
Within One
Mile RadiusSensitive Populations or Ecosystems
(e.g., schools, hospitals, wetlands, wildlife preserves, etc.)

None

Distance and direction from facility

**SECTION II: SOURCE
INFORMATION**

CR-ERNS Number: 626033

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.

For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Coffeen Power Station stack

1. Indicate whether the release from this source is either:

continuous without interruption ☒ OR routine, anticipated, intermittent ☐

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

Power generation - coal combustion
91% bituminous
9% subbituminous

3. Identify below how you established the pattern of release and calculated release estimates.

☒ Past release data ☒ Knowledge of the facility/vessel's operations and release history ☒ Engineering estimate
☐ AP-42 ☒ Best professional judgment ☐ Other (explain)

* Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.

**SECTION II: SOURCE
INFORMATION
(continued)**

CR-ERNS Number: 626033

Name of Source: Coffeen Power Station stack

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

☒ **AIR** ☒ (stack ☒ or area ☐) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

If identified source is a **stack**, indicate stack height: 500 feet ~~or meters~~, **OR**

If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: _____ square feet or square meters.

☐ **SURFACE WATER** _____ (stream _____, lake _____, or other _____)

If the release affects any **surface water body**, give the name of the water body.

If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.
stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.
surface area of lake: _____ acres and average depth of lake: _____ meters.

☐ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

For a stack release to air, provide the following information, if available:

Inside diameter _____ feet or meters

Gas Exit Velocity _____ feet/second or
meters/second

Gas Temperature _____ degrees Fahrenheit,
Kelvin, or Celsius

For a release to surface water, provide the following information, if available:

Average Velocity _____ feet/second
of Surface Water

SECTION II: SOURCE INFORMATION (continued)

CR-ERNS Number: 626033

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Coffeen Power Station stack

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances - A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)*		Upper Bound	Lower Bound	Number of Days Release Occurs (per year)	Total Quantity Released in Previous Year (in lbs. or kg)*	Months of the Release
Hydrochloric Acid	7647-01-0	21,344	12,088	365	5,699,882	12		
Hydrofluoric Acid	7664-39-3	1,218	689	365	346,341	12		
Sulfuric Acid	7664-93-9	5,184	2,935	365	633,861	12		

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances - A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance Components	CASRN#	Weight Percentage	Normal Range of Components (in lbs. or kg per day)*		Normal Range of Mixture (in lbs. or kg per day)*		Number of Days Release Occurs (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
			Upper Bound	Lower Bound	Upper Bound	Lower Bound			

* Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (Ci) are appropriate.

**SECTION III: SUBSTANCE
INFORMATION**

CR-ERNS Number: 626033

Calculation of the SSI Trigger

For EACH hazardous substance or hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance. Photocopy this page if necessary.

Name of Hazardous Substance: Hydrochloric Acid

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)

Stack

Upper Bound of the Normal Range of
the Release (specify lbs., kg, or G)

21,344

TOTAL - SSI trigger for this hazardous substance release* : 21,344 lbs

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate, so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

**SECTION III: SUBSTANCE
INFORMATION**

CR-ERNS Number: 626033

Calculation of the SSI Trigger

For EACH hazardous substance or hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance. Photocopy this page if necessary.

Name of Hazardous Substance: Hydrofluoric Acid

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)

Stack

Upper Bound of the Normal Range of
the Release (specify lbs., kg, or Ci)

1,218

TOTAL - SSI trigger for this hazardous substance release* : 1,218 lbs

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate, so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

**SECTION III: SUBSTANCE
INFORMATION**

CR-ERNS Number: 626033

Calculation of the SSI Trigger

For EACH hazardous substance or hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance. Photocopy this page if necessary.

Name of Hazardous Substance: Sulfuric Acid

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)

Stack

Upper Bound of the Normal Range of
the Release (specify lbs., kg, or G)

5,184

TOTAL - SSI trigger for this hazardous substance release* : 5,184 lbs

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate, so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

SECTION I: GENERAL INFORMATION

CR-ERNS Number: 626033

Date of Initial Release: 10/14/2002

Date of Initial Call to NRC: 10/14/2002

Type of Report: Indicate below the type of report you are submitting.

☒ Initial Written Notification ☐ First Anniversary Follow-up Report ☐ Written Notification of a Change to Initial Notification ☐ Written Notification of a Change to Follow-up Report

Signed Statement: I certify that the hazardous substances releases described herein are continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(a) or 355.4(a)(2)(iii) and that all submitted information is accurate and current to the best of my knowledge.

Michael L. Menne, V.P. Environmental, Safety + Health
Name and Position

20 December 2002
Date

Michael L. Menne
Signature

Part A. Facility or Vessel Information

Name of Facility or Vessel

Coffeen Power Station

Person in Charge of Facility or Vessel

Name of Person in Charge Jim Williams

Position Plant Manager

Telephone No. (217) 534-7646

Alternate Telephone No. (217) 534-7600

Facility Address or Vessel Port of Registration

Street 134 CIPS Land

County Montgomery

City Coffeen

State IL Zip Code 62017

Dun and Bradstreet Number for Facility

364138990

Facility/Vessel Location

Latitude Deg 39 Min 03 Sec 31
Longitude Deg 089 Min 24 Sec 11

Vessel LORAN Coordinates

Part B. Population Information

Population Density

Choose the range that describes the population density within a one-mile radius of your facility or vessel (Indicate by placing an "X" in the appropriate blank below).

0 - 50 persons 101 - 500 persons more than 1000 persons
X 51 - 100 persons 501 - 1000 persons

Sensitive Populations and Ecosystems Within One Mile Radius

Sensitive Populations or Ecosystems (e.g., schools, hospitals, wetlands, wildlife preserves, etc.)

None

Distance and direction from facility

**SECTION II: SOURCE
INFORMATION**

CR-ERNS Number: 626033

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate.

For EACH source of a release of a hazardous substance or mixture from your facility or vessel, provide the following information on a SEPARATE sheet. Photocopy this page if necessary.

Name of Source: Coffeen Power Station Stack

1. Indicate whether the release from this source is either:

continuous without interruption ☒ OR routine, anticipated, intermittent ☐

2. Identify the activity(ies) that results in the release from this source (e.g., batch process, filling of a storage tank). If malfunction, describe the malfunction and explain why the release from the malfunction should be considered continuous and stable in quantity and rate.*

Power Generation - coal combustion
96% Bituminous
4% Subbituminous

3. Identify below how you established the pattern of release and calculated release estimates.

<input checked="" type="checkbox"/> Past release data	<input checked="" type="checkbox"/> Knowledge of the facility/vessel's operations and release history	<input checked="" type="checkbox"/> Engineering estimate
<input type="checkbox"/> AP-42	<input checked="" type="checkbox"/> Best professional judgment	<input type="checkbox"/> Other (explain)

* Note that unanticipated events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents, do not qualify for reduced reporting under CERCLA section 103(f)(2). Unanticipated events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be considered stable in quantity and rate.

**SECTION II: SOURCE
INFORMATION
(continued)**

CR-ERNS Number: 626033

Name of Source: Coffeen Power Station Stack

Part B: Specific Information on the Source

For the source identified above, provide the following information. Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

AFFECTED MEDIUM. Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from this source. If your source releases hazardous substances to more than one medium (e.g., a wastepile releasing to air and ground water), treat the release to **EACH** medium as a separate source and complete Section II, Parts A, B, and C, of this format for **EACH** medium affected.

☒ **AIR** ☒ (stack ☒ or area ☐) If the medium affected is air, please also specify whether the source is a stack or a ground-based area source.

If identified source is a **stack**, indicate stack height: 500 feet or meters; **OR**

If identified source is an **area source** (e.g., waste pile, landfill, valves, tank vents, pump seals, fugitive emissions), indicate surface area: _____ square feet or square meters.

☐ **SURFACE WATER** _____ (stream _____, lake _____, or other _____)

If the release affects any **surface water body**, give the name of the water body.

If the release affects a **stream**, give the stream order or average flow rate, in cubic feet per second.
stream order: _____ or average flow rate: _____ cubic feet/second; **OR**

If the release affects a **lake**, give the surface area of the lake in acres and the average depth in meters.
surface area of lake: _____ acres and average depth of lake: _____ meters.

☐ **SOIL OR GROUND WATER** _____

If the release is on or under ground, indicate the distance to the closest water well.

Optional Information

The following information is not required in the final rule; however, such information will assist EPA in evaluating the risks associated with the continuous release. **If this information is not provided, EPA will make conservative assumptions about the appropriate values.** Please note that the units specified below are suggested units. You may use other units; however, be certain that the units are clearly identified.

For a stack release to air, provide the following information, if available:

Inside diameter _____ feet or meters

Gas Exit Velocity _____ feet/second or
meters/second

Gas Temperature _____ degrees Fahrenheit,
Kelvin, or Celsius

For a release to surface water, provide the following information, if available:

Average Velocity _____ feet/second
of Surface Water

SECTION II: SOURCE INFORMATION
(continued)

CR-ERNS Number: 626033

Part C. Identify and Quantity of Each Hazardous Substance or Mixture Released From Each Source

Please provide a SEPARATE sheet for EACH source. Photocopy this page if necessary.

Name of Source: Coffeen Power Station Stack

List each hazardous substance released from the source identified above and provide the following information. (For an example, see Table 1 of Reporting Requirements for Continuous Releases of Hazardous Substances - A Guide for Facilities and Vessels on Compliance.)

Name of Hazardous Substance	CASRN #	Normal Range (in lbs. or kg per day)*		Number of Days Release Occurs (per year)	Total Quantity Released in Previous Year (in lbs. or kg)*	Months of the Release
		Upper Bound	Lower Bound			
Hydrochloric Acid	7647-01-0	21344	12088	365	3,294,729	12
Hydrofluoric Acid	7664-39-3	1218	689	365	187,980	12
Sulfuric Acid	7664-93-9	5184	2935	365	800,208	12

List each mixture released from the source identified above and provide the following information. (For an example, see Table 2 of Reporting Requirements for Continuous Releases of Hazardous Substances - A Guide for Facilities and Vessels on Compliance.)

Name of Mixture	Name of Hazardous Substance Components	Normal Range of Components (in lbs. or kg per day)*		Normal Range of Mixture (in lbs. or kg per day)*		Number of Days Release Occurs (per year)	Total Quantity of Mixture Released in Previous Year (in lbs. or kg)	Months of the Release
		Upper Bound	Lower Bound	Upper Bound	Lower Bound			
		Weight Percentage						
	CASRN#							

* Please be sure to include units where appropriate. Also, if the release is a radionuclide, units of curies (Ci) are appropriate.

**SECTION III: SUBSTANCE
INFORMATION**

CR-ERNS Number: 626033

Calculation of the SSI Trigger

For EACH hazardous substance or hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance. Photocopy this page if necessary.

Name of Hazardous Substance: Hydrochloric Acid

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)

Stack

Upper Bound of the Normal Range of
the Release (specify lbs., kg, or G)

21,344

TOTAL - SSI trigger for this hazardous substance release* : 21,344 lbs.

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate, so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

**SECTION III: SUBSTANCE
INFORMATION**

CR-ERNS Number: 626033

Calculation of the SSI Trigger

For EACH hazardous substance or hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance. Photocopy this page if necessary.

Name of Hazardous Substance: Hydrofluoric Acid

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)

Stack

Upper Bound of the Normal Range of
the Release (specify lbs., kg, or Gt)

1218

TOTAL - SSI trigger for this hazardous substance release* : 1,218 lbs

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate, so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*

**SECTION III: SUBSTANCE
INFORMATION**

CR-ERNS Number: 626033

Calculation of the SSI Trigger

For EACH hazardous substance or hazardous substance component of a mixture indicated in Section II, Part C, list the names of the releasing sources and their upper bounds. Please use a SEPARATE sheet for EACH hazardous substance. Photocopy this page if necessary.

Name of Hazardous Substance: Sulfuric Acid

To calculate the SSI trigger (i.e., the upper bound of the normal range of a release) for the hazardous substance identified above, aggregate the upper bounds of the normal range of the identified hazardous substance across all sources identified in Section II, Part C. If the hazardous substance is also a component of a mixture, be certain to include the upper bound of the component as calculated in Section II, Part C, in your calculation of the SSI trigger.

Name of Source(s)

Stack

Upper Bound of the Normal Range of
the Release (specify lbs., kg, or Ci)

5184

TOTAL - SSI trigger for this hazardous substance release* : 5,184 lbs.

** This method for calculating the SSI trigger for the hazardous substance assumes that all releases of the same hazardous substance or mixture occur simultaneously. To the extent that a hazardous substance is released from your facility from different sources and at different frequencies, you may adjust the SSI trigger as appropriate, so that it more accurately reflects the frequency and quantity of the release. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility or vessel. The normal range of the release includes all releases previously reported or occurring over a 24-hour period during the previous year.*